

CHAPTER 2. Planning and Preparation

Planning Stages

The 1974 Census of Agriculture involved many stages of planning, some beginning years before actual data collection. Throughout the 1969 census period, observations and suggestions were noted and compiled for later reference. Correspondence from advisory committee members, respondents, and other data users was reviewed for indications of potential problem areas in 1974. With this collection of ideas and suggestions, and through a series of meetings, a basic plan for the new census was formed.

Some specific areas of emphasis during the early planning stages of the census were: (1) improvements in obtaining and using current mailing lists, (2) inclusion on the report form of various areas not previously considered (e.g., grain and fuel storage, accidents on farms), and (3) expansion of the coverage of foods and fiber production and, particularly, nonagricultural activities conducted by farm operators as additional sources of income.

The budgets for both the 1969 Census of Agriculture and the proposed 1974 enumeration were comparable. The 1969 census cost approximately \$26 million and the 1974 operation was nearer \$25 million without the additional expense of an irrigation and drainage census (taken in conjunction with the agriculture census every 10 years and last taken in 1969). It was believed that increased expenses in printing and mailing incurred by the proposed two-phase mailout/mailback would be balanced by the time saved in editing, reviewing, and processing the report forms. Although mail enumeration would be much less expensive than the personal interview method, it would require extensive mailing list development and maintenance to avoid duplication and assure complete coverage.

Failure to obtain full coverage in any mailout/mailback census can be due to many factors, among which are the following:

1. Mailing lists, including supplemental listings provided by other Federal and State agencies, some commodity associations, and agribusinesses, do not include all operators that need to be enumerated. Many small farm operators have no reason to file farm returns with the Internal Revenue Service (IRS), do not participate in Government programs administered by the Agriculture Stabilization and Conservation Service (ASCS), and are not included on any other mailing list sources.
2. Bureau experience indicates that the percent of cases missed (miss rate) in all censuses for which coverage checks were conducted was considerably greater for farms

with total value of products less than \$2,500 than for the larger farms. The principal reasons for misses in the 1969 census were inadequate lists, especially for small farms; misunderstanding of respondents as to who should report a farm if, for example, the operation was a partnership or a landlord/tenant arrangement; and respondents, especially those with small operations, who classified themselves as out of scope (not eligible for inclusion in the census) when, in fact, they were in scope. (If the operation did not meet the definition of a farm,¹ then the operation was classed as out of scope.)

Consultation on the Census Program

In 1974, the Bureau of the Census invited the U.S. Department of Agriculture (USDA) and other agriculture census data users to comment on the proposed contents of the census report form and on possible supplementary surveys. The Census Advisory Committee on Agriculture Statistics offered advice regarding priorities for the inclusion of new items and how to obtain the most meaningful responses.

The organizations represented on the Census Advisory Committee were as follows:

Agricultural Publishers Association
 American Agricultural Economic Association
 American Farm Bureau Federation
 American Farm Bureau Women's Committee
 American Feed Manufacturers Association
 American Meat Institute
 American Petroleum Institute
 Conference of Consumer Organizations
 Farm and Industrial Equipment Institute
 Federal Statistics Users' Conference
 National Agricultural Chemicals Association
 National Agri-Marketing Association
 National Association of State Departments of Agriculture
 National Association of State Universities and Land Grant Colleges
 National Cannery Association
 National Council of Farmer Cooperatives
 National Farmers Organization
 National Farmers Union
 National Grange
 Rural Sociological Society

¹Based on combination of "acres in place" and quantity of agricultural resources on the place or quantity of agricultural products produced.

U.S. Department of Agriculture, Economic Research Service (ERS)

U.S. Department of Agriculture, Statistical Reporting Service (SRS)

Representatives of Statistics Canada, the U.S. Office of Management and Budget, the Animal Health Institute, the Bureau of Economic Analysis, and other private and Government agencies attended some of the meetings as observers.

While planning and conducting the census, the Bureau collaborated closely with USDA, principally through a departmental committee that coordinated the needs and suggestions of all the USDA agencies. The Statistical Reporting Service and the Economic Research Service contributed to the development and formulation of inquiries, and each detailed a senior staff member to work directly with the Bureau during the planning phase of the enumeration.

Report Forms

Development of the report forms for the 1974 census was based largely on data-collection experience gained during the 1969 Census of Agriculture and suggestions received from data users and Census Advisory Committee members. Among the Bureau's immediate concerns were the development of pretest forms to encompass (1) changes in the structure of agriculture, (2) demands for statistics on commercialized operations, (3) the effects of applied science, mechanization, automation, and environmental problems, and (4) a possible change in the farm definition. (For a complete discussion of the farm definition, see ch. 1.)

Subjects finally adopted for inclusion that were not covered in 1969 were fish products, artificial ponds, pits, reservoirs, earthen tanks, the futures market, grain and fuel storage, injuries and illnesses connected with farm/ranch work, and off-farm income. For the first time, specific questions were included about farms operated by corporations; however, these data were collected as part of the precavass taken in April 1974, and in a special survey of corporations in agricultural production, and were published separately. (For a detailed discussion of the changes made in the report forms for the 1974 enumeration, see ch. 3.)

Hawaii and Alaska

As for prior censuses, a tailored A1 form was used for the 1974 agriculture enumeration in Hawaii. The form 74-A1(H) conformed to the general format and layout of the standard A1 used in the conterminous 48 States, but included queries about crops of particular importance to, or unique to, Hawaii. It was printed in black and red ink on blue stock for easy identification in the Jeffersonville processing center. (See ch. 3 for a description of the changes made in the form for 1974. A facsimile is provided in app. F.)

The standard A1 form was used for Alaska because of the few farms reporting. Telephone followup was neither planned nor undertaken.

The data-collection forms and followup letters for Alaska and Hawaii were mailed at the same time as those for the conterminous 48 States.

Mailout Plans

It was initially proposed that the first two mailouts for this census would occur 6 months earlier (July 1974) than in the 1969 census. A short form was to be mailed to approximately 4.1 million names and addresses on the mailing list to help identify the type of farming done by the respondent. The form would—

1. Reduce the original mail register of agriculture-associated operations to those identified as farming or ranching.
2. Absorb the functions served by the precavass of large and complex operations (multiunits) conducted prior to the 1969 census.
3. Categorize farm operators by their specialized types of agricultural production.
4. Provide preliminary census data that could be published shortly after the end of 1974.

In January 1975, a second report form was to be mailed to all names still on the mailing list (out-of-scope operations and other invalid cases having been removed) and to any new cases (births) discovered in the initial mailings. This mailout was to be the principal data-collection effort, serving to (1) combine the functions of the general 1969 report form and the 1971 specialized survey, and (2) provide farm operators with report forms tailored to the types of activities they conducted in 1974.

Since the second phase of the 1974 mailout would categorize operations by type of farm, additional farm enterprise surveys would not be necessary. The only supplemental survey considered was an agricultural finance survey.

The 1972 Pretest

On the basis of the proposed changes for the 1974 census, as well as various other considerations, three different short forms were developed for testing. In the first phase of the pretest, these forms were mailed to a national sample of 6,800 respondents on July 14, 1972, as follows:

Form	Composition	Number mailed
72-XA1	Relatively complete instructions	3,400
72-XA2a	Very limited instructions	1,700
72-XA2b	The same limited instructions as the XA2a, but with item descriptions adjacent to the answer spaces rather than being blocked to a left margin and connected to the answer spaces by a dotted line	1,700

Each of the three versions tested a variant approach to satisfy the purpose of the pretest, namely—

1. To indicate the kind of farm and which report form should be sent to each respondent to obtain more detailed information for use in the second phase of the data collection;
2. To eliminate from the address register those individuals no longer farming;
3. To ascertain if the questions were being asked in a way that the respondents would be both willing and able to respond correctly;
4. To evaluate the length of the instructions; and
5. To identify any other problem areas.

Upon return, the 72-XA2a and 72-XA2b forms were examined for completeness of coverage. Those farm operators who conducted specialized operations of a size sufficient for classification, but for which the pertinent data had not been requested, were sent the appropriate pages of the report form in a supplemental mailing.

Followup

On August 29, 1972, after only 2,095 pretest report forms had been returned, the first followup for the pretest mailing was conducted by mailing a duplicated letter, 72-XA5(L), to about 4,700 nonrespondents. A second followup letter, 72-XA6(L), was mailed to 3,680 nonrespondents on October 12, 1972. A final tally of reports received totaled 4,100, constituting about a 60-percent response rate for the pretest (compared with 90 percent for the 1969 census). There was no extensive followup by telephone or field contact, as would normally take place in the census.

Respondents who were to receive report forms in the second phase of the pretest data collection were identified from among respondents to the first-phase mailout. However, this phase, which would have been comparable to the proposed January 1975 mailing, was not conducted because of the departmental decision to delay the agriculture census from 1974 to 1977. The forms received from the first phase were kept for analysis.

The 1974 Pretest and Questionnaire Evaluation Study

Planning for the 1974 Census of Agriculture was resumed in October 1973. The Bureau began to assemble and unduplicate an address list for a January 1974 mailout to pretest a general-purpose data-collection form. A sample of potential farm operators in one county in each of 11 States was used. The principal objectives were to test the collectability of the information desired, to evaluate the alternative versions of items proposed for inclusion on the standard A1 form, to develop

and test mailout and check-in procedures for initial and follow-up mailings, and to develop and test procedures for the follow-up of nonrespondents.

Location and Scope

A sample of 4,062 farms with economic class (EC) codes of 1 to 5 (i.e., total value of products (TVP) sold of \$5,000 to \$99,999) was drawn from the 1969 census mailing lists for the following counties:

	Number of sample units
Total	4,062
Columbia, N.Y.	353
Craighead, Ark.	415
Cullman, Ala.	362
Fulton, Ohio	340
Hall, Nebr.	377
Hillsborough, Fla.	386
Lea, N. Mex.	328
Marion, Oreg.	408
Tulare, Calif.	341
Twin Falls, Idaho	351
Wayne, N.C.	401

These counties were chosen because they were geographically dispersed, none had been included in special projects since 1964, all were large enough to provide a sample of at least 300 operations, and their agriculture activities were sufficiently varied to provide a reasonable cross-section of agriculture in the country.

Multiunits and farms with EC codes of 0 (\$100,000 or more) were excluded from the sample so as not to burden the respondents with report forms from two surveys at the same time.

Pretest Report Forms

Two report forms were used for the pretest: 73X-A1(A) was considered the basic data-collection form for the enumeration and 73X-A1(B) was designed to test variations of the basic items. Both were 14-page, 10- x 15-inch pamphlets printed on white stock. Form 73X-A1(A) was printed in dark green ink with light green shading; form 73X-A1(B) was printed in dark blue ink with light blue shading.

Variations in the contents were slight. Section 31 (accidents) of the A1(A) form requested data on work-related injuries if one or more working days had been lost as a result of such injuries, while on the A1(B) form, section 31 (Work Connected Injuries and Illnesses) specified that Occupational Safety and Health Administration (OSHA) records be used, if available, to complete this section.

The A1(A) section 36, Farm Related Income, and section 37, Type of Organization, Operator Characteristics, and Related Information, were reversed on the A1(B), becoming sections 37 and 36 respectively. Section 37 on the A1(A) was divided into two parts: one was concerned with type of organization, farm work, and nonfarm business activity; the other, with farm

operator characteristics. On the A1(B) form, the equivalent section 36 was divided into four parts covering sole proprietorship or partnership operations, and corporation operations. A check-off option to designate whether the operation was conducted by a sole proprietor, partnership, corporation, or other system (such as cooperative or estate) was included on the A1(B); and respondents were instructed to skip those parts not applicable to their operations.

Mailout and Followup

The pretest was conducted in two phases: (1) a mailout and mail followup and (2) personal interviews of a sample of respondents and nonrespondents. The initial mailout of pretest report forms to 4,062 addresses on the sample list was made on January 17, 1974. (Each county list was divided approximately in half, so that 2,031 each of the A1(A) and A1(B) forms were mailed.) By the end of January, only 1,015 responses had been received. The first followup letter, form 73-XA5(L), was sent to 3,047 nonrespondent addresses on February 7. Three weeks later, on February 28, the second and final followup letter, form 73-XA6(L), was mailed to 2,112 nonrespondents. By March 8, approximately 52 percent of the report forms mailed had been received or accounted for: 908 completed A1(A) forms, 849 completed A1(B) forms, 261 postmaster returns (PMR's) adjudged undeliverable, and 91 forms returned blank. This rate of return was considerably below that of a similar stage of the 1969 census pretest, when about a 63-percent response rate was attained.

Personal Interviews

The interview phase of the pretest had three primary objectives: (1) discover how respondents completed the form, (2) ask for suggestions on how to improve the report form, and (3) obtain responses, if possible, from nonrespondents. The sample of 1,257 addresses consisted of the following types of reports:

1. Reports requiring no edit changes.
2. Partially completed reports containing blanks.
3. Reports containing problems in edit other than blanks.
4. Blank reports that were not the result of duplicate mailings (nonreturns, refusals, postmaster returns, and those for which respondents had asked for assistance).

While half of the sample consisted of A1(A) and half of A1(B) respondents, and an attempt was made to ensure that this division was reflected in the makeup of each county sample, the variations in the quality and rate of response from county to county prevented anything but an approximate balance to be struck. Furthermore, the fuel shortages at that time led to the decision that the county samples (at least 100 addresses were drawn for each county) should be selected in part for their

geographic concentration to minimize automobile travel. It was felt that the bias caused by such a cluster technique would not be so large as to invalidate the survey results.

A 3-hour training class was held for the field interview staff at the Bureau of the Census; after that, 10 days were spent in the field contacting farmers. The staff found farmers generally cooperative toward the census operation and willing to help if they could. Opinions often expressed were that the questionnaire was too long and that some items, particularly those dealing with income, were invasions of privacy. Among sections of the A1(A) and A1(B) forms that seemed to cause respondents the most difficulty were the following:

Section 1, Location of Agricultural Activity. Interviewers found that the Bureau should define "this place" in item 1. Respondents indicated confusion as to which locality was desired in item 2 (township, precinct, election district, etc.) since many found themselves in more than one of these jurisdictions.

Section 4, Acreage in 1973, Ownership, and Land Value. There was some question as to whether pastureland, woods, etc., should be included. Some respondents thought only cropland was requested.

Section 21, Land Use and Irrigation in 1973. The use of the word irrigation in the heading caused many respondents to skip this section. Others found it very difficult to estimate the amount of water used.

Section 29, Machinery and Equipment. Respondents often misreported the year their equipment was manufactured, and had trouble estimating its value. Respondents felt that it was necessary to clarify whether autos and trucks reported must be used in farm business.

Section 31, Accidents. The request to use OSHA records to complete the A1(B) form was unpopular. Most farmers had little or no knowledge of OSHA requirements.

Section 32, Insecticides, Herbicides, Fungicides, Other Pesticides, Lime, and Other Chemicals. Respondents felt the report forms were unclear as to how dual- and/or multi-purpose chemicals applied simultaneously should be reported. The cost of individual chemicals was difficult to estimate and it was difficult to separate application and chemical costs when custom operators were hired to apply the chemicals.

Section 33, Contracts. Certain contract operators, such as those for citrus and broilers, found it hard to estimate market value for their products.

Section 34, Production Expenses. Respondents had difficulty answering questions on the gallons of gasoline and other fuels purchased (item 6), and on the landlord's share of expenses (item 13).

Respondents also found it difficult to supply information on the total tons of liquid fertilizer applied as requested in the various crop sections (sections 5 through 20).

The interview phase of the pretest ended on March 29, by which time the field staff had obtained 696 additional completed A1(A) and A1(B) forms and had identified a further 114 out-of-scope addresses.

Processing the Forms

Report forms returned to Suitland during the mailout and followup phases of the pretest were sorted into two groups: those left blank or only partially filled out and those apparently complete. Addresses from the incomplete questionnaires were added to the list from which the field interview sample was to be selected, completed report forms were submitted for further edit, and the count of completed and incomplete forms received was entered on a work-unit listing sheet.

Editors were supplied with a form A73X-A7, "1974 Agriculture Census Pretest Recheck Listing Sheet," for each questionnaire they were to review. As the edit of each section of the form was completed, its status was indicated on the listing sheet: "Passed Edit," "Edit Problem," or "Partial Blanks." If the data supplied seemed inconsistent, out of range, or otherwise suspect, the editor wrote a brief explanation of his conclusion in the space provided. The application of these procedures helped stratify the pretest universe for selection of the field interview sample.

Changes to the A1 Form As a Result of the Pretest

Reactions of respondents to the data-collection form used in the pretest led the Bureau to make several changes in its content. The number and scope of these changes were limited by budgetary and other considerations. Some of the most significant changes were as follows:

1. Section 21, Land Use and Irrigation in 1973, was divided into two separate sections: section 18, Land Use in 1974, and section 19, Land Irrigated.
2. The request that OSHA records be used to supply data for section 31, Accidents, was omitted.
3. Check boxes were substituted for write-in boxes in section 33, Contracts.
4. The request for estimates of gallons of fuel purchased was omitted from section 34, Production Expenses, and the fuel storage capacity of the farm was requested instead.

Preliminary Survey of Selected Operations (Precanvass)

Because of the statistical importance of large farms, the Bureau attempts to ensure that they are included in the enumeration. Based on experience gained in the 1969 census, the Bureau

had four main purposes in conducting a precanvass in the 50 States prior to the 1974 census:

1. To collect information to update the mailing list of large agricultural production units and remove any duplicate entries. Information would also be collected to update the mailing list for the census of agricultural services.
2. To identify companies and organizations with multi-establishment operations. Between 1969 and 1974, the concept of multiunits underwent a change. In 1969, a multiunit had to include two or more agricultural establishments; in 1974, a multiunit included two or more establishments, one of which had to be an agricultural operation or service. If an organization had both agricultural and nonagricultural operations, it was treated as a multiunit, provided the agricultural operation(s) met the following criteria of separation: (1) Separate records (or adequate estimates) were maintained of operating expenses, sales, livestock inventories, machinery and equipment, and crop acreages and production; and (2) the agricultural production unit was at a separate physical location or two or more units were operated at the same location, but as distinctly separate units.
3. To obtain information about corporate organizations and feedlots. The precanvass eliminated the need for a block of questions in the census. Any corporation or feedlot not covered in the precanvass, but subsequently identified in the census, was sent one of several short supplementary questionnaires covering its organizational structure and nonfarm activities.
4. To identify large units with extensive nonfarm activities, measure their involvement in agricultural production and assess the resulting interrelationship. In collection of these data, consideration was also given to the probable coordination of the agriculture and economic censuses and the publication in later censuses of company agricultural and nonagricultural statistics.

The precanvass universe comprised the following (abnormal units, such as Indian reservations and institutional farms, were excluded):

Multiunit operations having agricultural operations.

Farms with sales of \$100,000 or more with 1,000 or more cross-line acres (acreage in more than one county) in 1969.

All other farms with 10,000 or more cross-line acres in 1969.

Farms with sales of \$500,000 or more.

All farms classified as corporations.

Mailing List

Several sources were used to produce the prec canvass mailing list:

1969 Census of Agriculture. The basic 1969 agriculture census file, containing approximately 2.2 million records, was sorted by State, county, and ID number. Between November 1 and December 10, 1973, all records appropriate to the prec canvass universe (about 30,000) were selected from the 1969 census file. Within this file, approximately 4,000 operations originally coded as corporations were subsequently discovered not to be incorporated. Based on error listings produced during the 1969 census processing, these records were corrected and deleted from the prec canvass file unless they represented multiunits or operations with \$500,000 or more in sales. About 200 multiunit farming companies, reported for the first time in 1969 and identified only in later processing, also were matched to the 1974 prec canvass file and were added if necessary. When the address file was sorted for possible duplications, approximately 3,000 addresses were found to be for parts of multiunits or other operations already in the file or from other sources not entered in the file—these were deleted as necessary.

1972 Economic Censuses. Over 30,000 records were selected from the 1972 economic censuses out-of-scope listings of single-unit and multiunit companies with indications of agricultural operations covered by major SIC (Standard Industrial Classification) codes 01 (agricultural production, crops), 02 (agricultural production, livestock), and 07 (agricultural services). Records for all corporations with agricultural SIC codes were selected, regardless of size. Single-unit establishments were selected if they had annual receipts of \$500,000 or more, employment of 20 or more persons, or an annual payroll of \$200,000 or more. All records were matched by EI (employer identification) and/or Social Security numbers against the agriculture prec canvass file, and approximately 21,000 cases were added. About 1,200 multiunit establishments were identified from the 1973 Company Organization Survey (COS). To avoid conflict with this ongoing survey, prec canvass questionnaires were not sent to any of these establishments, but required information that did not appear on COS responses was collected by telephone from the Bureau's Jeffersonville facility.

Supplementary lists. Using lists furnished by the Economic Research Service of the U.S. Department of Agriculture, names and addresses of 673 poultry integrators and 268 commercial feedlots not found in the agriculture census records were added to the prec canvass mailing list.

Report Form

A prec canvass form was produced in two versions with virtually identical content. (See app. F for facsimiles.)

Form 74-A20 was sent to organizations within the universe not known to have had multiunit operations in 1969. Respondents were asked to list the agricultural production units which met the separation requirements described above.

Form 74-A21 was sent to organizations known to have had multiunit operations in 1969. Each agricultural production unit was identified on the questionnaire by a label addressed by high-speed printer and applied manually. The respondent was asked to indicate whether that unit was still active or whether it had been sold or leased, and, if so, to whom the unit had been transferred. New agricultural production units were to be added if they met the criteria of separation. (See p. 13.)

Both versions of the questionnaire contained the following items.

Agricultural Activity. Whether at any time during 1973 or 1974, the addressee conducted feedlot operations (for cattle, hogs, sheep, etc.) or produced grains, vegetables or melons, fruits and tree nuts, horticultural crops, other crops (hay, pasture, cotton, tobacco, peanuts, sugar crops, Irish potatoes, etc.), livestock (and/or had them on hand), dairy products, poultry or eggs, animal specialties, forest products on farms, or any other agricultural production.

Agricultural Production Units. Identification, location, principal products produced, estimated annual gross receipts from agricultural production, and number of employees as of the pay period including March 12, 1974.

Agricultural Service Establishments. Name and address, type of service performed, estimated annual gross receipts, whether the agricultural services receipts constituted 50 percent or more of the total receipts, whether the operation was conducted as part of any agricultural production unit already reported, and the number of employees as of the pay period including March 12, 1974.

Business-Related Activities. If, during 1973 or 1974, the addressee or any of its associated or subsidiary companies received \$50,000 or more estimated gross receipts from business activities other than agricultural production or services, the respondent was asked to indicate whether the addressee or any of its subsidiaries produced and supplied any farm inputs to its own farming/ranching activities or processed any farm products from its own farming/ranching operations and, if so, what commodities or products. All types of manufacturing, processing, wholesaling, retailing, and other functions performed by the addressee or any of its subsidiaries were to be reported, together with information about the principal products, kinds of business and/or service, and the estimated annual gross receipts for each.

Feedlot Operations. If, during 1973 or 1974, the addressee or any of its subsidiaries had feedlot operations, the respondent was asked what the one-time capacity for cattle, swine, sheep, or other animals was; the number of cattle marketed; the percentage of marketed cattle custom-fed for others; and the number of participants, investors, individuals, or groups of individuals for which cattle were fed on a custom basis.

Legal Form of Organization. The addressee was asked to provide a description of the legal organization of the operation—sole proprietorship, partnership, corporation, or other (e.g.,

cooperative, estate or trust, prison farm, grazing association, Indian reservation)—and the percentage of the total business receipts attributable to farming or ranching. If the organization was a corporation, the following information was requested: Description (family, independent, parent with subsidiaries, or subsidiary); approximate size of total 1973 business receipts (farm and nonfarm, including parent corporations and their affiliates); percent of total 1973 business receipts involving farming or ranching, supplying farm production inputs, processing, wholesaling or retailing of farm products, and other business outside the food and fiber industry; and the year in which the corporation began to produce agricultural products. If the corporation was privately held, the following items were to be completed: Year of incorporation, whether the corporation elected to be taxed as a partnership for Federal income tax purposes in the latest fiscal year, number of shareholders in 1973, number of shareholders related by blood or marriage, how many shareholders constituted a majority of ownership, and whether more than one-half of the day-to-day management of the corporation was provided by shareholders.

The respondent also was asked to indicate the name, address, and telephone number of the addressee for the 1974 Census of Agriculture report forms, to verify or supply EI numbers, and to list controlling or controlled companies associated with the place covered by the prec canvass report form.

Mailout, Mailback, and Followup

During March 1974, the Bureau's Jeffersonville facility assembled and labeled the prec canvass mailing packages, using mailing and control labels furnished by the Suitland headquarters. Each package consisted of a cover letter with its appropriate A20 or A21 questionnaire, and a postage-prepaid return envelope addressed to Jeffersonville. The majority of these packages were mailed from Jeffersonville during the first week of April; the balance was mailed in May.

Various followup actions took place in Jeffersonville after cutoff dates spaced 20 days apart. (See below.) All nonresponse cases involving multiunits, sales of \$500,000 or more, and units from the supplemental lists were contacted by telephone, if necessary. Other nonresponse cases were followed up by mail only and no further action was taken if they remained unanswered after the final followup. Mailout may be summarized as follows:

Phase I, April 1974

53,053 single-unit cases
38,795 agricultural production
14,258 agricultural services (13,870 corporations, 388 other)
1,286 multiunit cases

Phase II, May 1974

268 feedlots
673 poultry integrators
1,130 missed cases
235 successor operators reported on returned forms A21

The following figures refer only to phase I; a similar schedule was used for phase II.

Number mailed	Form number	Date mailed	Mailed to—
After 20 days:			
31,070	74-A20/A21-L2 letters	May 3	All nonresponse cases.
After 40 days:			
21,109	74-A20/A21-L3 letters, plus A20	May 24	All single-unit non-response cases, except those listed below.
2,957	74-A20 A21-L16 letters	May 24	Nonresponse cases selected for telephone followup, namely multiunits, single-unit cases with sales of \$500,000 or more appearing either in the agriculture census or in both the economic and agriculture census files, and cases with administrative receipts of \$500,000 or more appearing in the economic census records. The cases selected for telephone followup were excluded from further mailings.
After 60 days:			
17,273	74-A20/A21-L4 letters, with appropriate A20 or A21	June 12	
After 80 days:			
11,243	74-A20/A21-L19 letters	July 11	

Between June 13 and August 2 the Jeffersonville staff telephoned 2,082 selected nonresponse cases and completed the reports.

A total of 40,564 reports was received from the April 1974 mailout, representing a 74.6-percent return rate. In addition, 2,696 respondents returned one or more duplicate reports. The Bureau received 3,750 pieces of correspondence containing data, 9 replies through Congressmen; and 1,956 postmaster returns (PMR's). The May 1974 mailout resulted in 1,547 returns (67.1 percent). Of the 45,990 unduplicated reports received, 13,479 were for operations not within the scope of the 1974 Census of Agriculture. Of the 32,511 in-scope returns, 20,234 represented single-unit agriculture production, 6,181 were single-unit agricultural services, and 6,096 were multiunit cases.

Receipt and Check-In. Between May 1 and early September 1974, the receipts were sorted daily by type, e.g., correspondence, refusals, letters with report forms, blank returns, or PMR's. The questionnaires were formed into work units of up to 100 of each type (A20 or A21) for clerical editing, and other items by daily accumulation. A sample of each day's receipts was selected and photocopied for quality control

purposes. PMR's resulting from the original mailing were checked against the control records to obtain better addresses and remailed if possible. All other units, accompanied by work-unit identification sheets, were forwarded for check-in keying where the work unit and identification numbers for each document were entered on computer tape. The resultant tapes were transmitted each Thursday via datalink to Suitland and entered on the precavass control file in a series of five check-in runs, the last on July 24. Followup label listings and satisfied-status reports were generated from the control file as needed.

A unit in Jeffersonville reviewed all correspondence before clerical editing began. This review determined whether additional letters or materials needed to be sent to the respondent; if so, the unit prepared and mailed them. Requests for extensions of time up to August 10, 1974, were granted routinely. Respondents' statements that they already had filed reports were checked against the satisfied-status listings. Form letters were used for most standard situations. Discrepancies and other problems not amenable to routine handling were referred to analysts. All completed work was verified 100 percent and a file was established to control each of the 3,000 cases processed through this correspondence unit.

Clerical Editing. After check-in, each report form was reviewed for completeness and consistency. For example, a blank entry for the number of employees could be accepted if the crop(s) grown were not normally harvested during the reference week (March 12).

However, the principal purpose of the clerical review was to make certain that there was sufficient information to ensure coverage in the census. On the basis of this review, the return was assigned to one of four groups: (1) Reports ready for data-keying; (2) reports for establishments in which a unit change had occurred, requiring verification or a change in the farm's identification number; (3) reports requiring correspondence; and (4) reports indicating that the enterprise was out of scope for the census. Duplicate reports were examined to determine which ones would be retained. Certain reports in groups 2 and 4 were referred to the supervisor, to an analyst, or to the directory unit (which dealt with ID numbers) for action. In addition to general instructions, each editor was provided with a check listing that gave detailed actions to be taken if and when specified situations (e.g., no State or county location reported, different address given than was on the mailing label) were encountered as each section of the report forms was reviewed. Aside from such editing directions as might be required (e.g., deleting percent signs, changing spelled-out numbers to numerals), this listing informed the editor when a report form with an apparent problem could be accepted and, if it could not, where it should be referred for further analysis.

Over 34,000 cases were edited between May and September 1974, and approximately 5,800 cases were processed through the directory unit.

After the report forms were edited and the problems referred to the analysts were resolved, the forms were returned to a central unit for (1) the assignment of two-digit State and three-digit county codes, (2) preparation and review of census

control file changes (form EC-1973 was used for additions and name and/or address changes, and form DP-86 for unit deletions), and (3) verification of operations 1 and 2, and transmission for final clerical control and data keying. The data keying began in mid-June and was completed in early October 1974. A total of 20,234 agriculture production single units, 6,181 agricultural services single units, and 6,096 multiunits (of both types) were keyed, and the data were transmitted to Suitland via datalink.

Computer Editing. Name and address additions, corrections, and deletions were carried to the control file in the fall of 1974 to be included in the census mailing list then being compiled by computer. (See below.) In the spring of 1975, the precavass record file was computer-edited for internal consistency and completeness. No items were imputed, but records—particularly for corporations—on which critical items were lacking were printed out, and their respondents were contacted by telephone to obtain the necessary information. These data were keyed and the records were recycled.

Preliminary counts of the precavass data were prepared. Counts for certain items were furnished to the USDA's Economic Research Service for a study of farm classification that involved analysis of farm and nonfarm activities of large operators. The records for all corporations and for feedlots of specified size were extracted from the precavass file for later comparison with the 1974 census returns.

Results

The precavass served its announced purposes of identifying and insuring coverage of multiunits, agricultural services, and large units with nonfarm activities and of obtaining information about corporate organizations. No changes were made in either the census report forms or the procedures as a result of the precavass. This operation did reveal, in advance of the census, that the number of farms with two or more agriculture production units had increased from about 1,050 in 1969 to 1,600 in 1974.

Address List Compilation

An accurate mailing list is essential to the mailout/mailback technique of data collection. This list must contain as many in-scope cases as possible, and have no duplicates. The computerized mailing list for the 1974 Census of Agriculture was a composite list of addresses derived from a number of sources. Lists of farm operators and their addresses were gathered from such sources as IRS, the Agricultural Stabilization and Conservation Service (ASCS), and the Bureau of the Census. The lists were then matched by computer and any apparent duplicates were deleted. From an initial list of about 14 million names and addresses, this procedure yielded a final mailing list of approximately 4 million addresses.

In 1969, when the Bureau had unduplicated its mailing list only on the basis of social security numbers (SSN's) and employee identification numbers (EIN's), it was found that the list contained nearly 350,000 duplications. Therefore, Bureau

personnel devised a compilation and unduplication process for 1974 that included several innovations, the major one being the addition of a name and address match phase.

The 1974 census mailing list was compiled and refined by computer at Census Bureau headquarters. The entire process was carried out between August and October 21, 1974, and required about 193 computer hours. The resulting address tapes were delivered by October 28, 1974, to the contractor that printed and labeled most of the forms.

Sources

Names and addresses for the original file were derived from about 200 computer tapes supplied from a number of sources.

Source	Number of records
TOTAL	14,041,163
1974 agriculture census precavass	65,846
Special lists (Census Bureau lists of farms which were large enough to merit special handling. These usually produced only one type of product.)	131,892
1972 economic censuses out-of-scope file	81,394
1969 Census of Agriculture	2,141,891
Agricultural Stabilization and Conservation Service (This is a file of landlords and farm operators enrolled in ASCS programs.)	6,378,181
IRS Individual Master File (1040F and C, including expansion for multiple names and addresses) ¹	4,572,779
IRS Business Master File (1065, 1120S, 943) ¹	511,974
1972 business census list of nurseries	485
IRS 1040F and C, name and address only. (These records lacked size information.)	156,721

¹ IRS forms included—

1040F—Schedule of Farm Income and Expenses. Attachment to form 1040, Individual Income Tax Return

1040C—Profit (or Loss) from Business or Profession. Attachment to form 1040

1065 —Partnership Return of Income

1120S—Small Business Corporation Income Tax Return

943 —Employer's Annual Tax Return for Agricultural Employees

Most of these tapes were updated versions of those used to prepare the 1969 Census of Agriculture mailing list. At various unduplication stages, any duplicate records had to be deleted. It was not, however, desirable to delete all information codes (i.e., address, size, standard industrial classification, or principal industrial classification) that a record might contain. Certain records were considered to be better sources for certain information than others; selection of sources was made on the basis of the following priorities:

Address sources

Priority	
1.	Precavass
2.	IRS 1120S
3.	IRS 1065
4.	IRS 1040F and 1040C
5.	IRS 1040F and 1040C Alpha (name and address only)

6. IRS 943
7. Economic census out-of-scope
8. Special lists
9. ASCS

Size sources

Priority	
1.	Precavass
2.	IRS 1040F and 1040C
3.	1969 Census of Agriculture
4.	Special lists
5.	Economic censuses out-of-scope
6.	IRS 943
7.	IRS 1120S
8.	IRS 1065
9.	ASCS

Standard classification code

or

principal industrial classification code sources

Priority	
1.	Precavass
2.	Economic censuses out-of-scope
3.	1969 Census of Agriculture
4.	IRS 1040F and 1040C
5.	IRS 1120S
6.	IRS 1065

Example: Suppose there were two records for John M. Smith of a given address, both with SSN 999-99-9999. The records were identical except that they contained different size information. One record was from the precavass list, while the other was derived from the special lists. During unduplication, the size information from the precavass list would be retained while that from the special lists would be carried as supplemental data.

Prior to any of the unduplication processes, records with ZIP codes for the following outlying areas were deleted: Puerto Rico, Virgin Islands, Canal Zone, Caroline Islands, Guam, Mariana Islands, Marshall Islands, American Samoa, and Wake Island. (Puerto Rico, Guam, and the Virgin Islands would be included in the 1974 agriculture census, but would be enumerated by field interviewers, not by mail.)

Records from all sources were formatted into a common layout, which involved placing fields (e.g., the ZIP code) in the same area of each record. Records from the IRS 1040F and 1040C file sometimes contained two SSN's, usually for a husband and wife. For these cases, a separate record was made for each number, and a cross reference was included. Certain information, such as the size code (or data from which such information could be derived), was transferred from source tapes to formatted records.

After formatting, the records were split into six files: (1) records containing SSN's but not EIN's, (2) records containing EIN's with or without SSN's, (3) records that contained Z codes but not SSN's or EIN's, (4) records containing none of the above, (5) records with SIC codes beginning with 07 (this file was to be used later to create the agriculture services mailing list), and (6) the trace file (discussed later in this section).

Social Security Number (SSN) Unduplication

For the first unduplication phase, all 12 million records containing SSN's were sorted, merged, and divided into about

20 cuts. (A cut is the most convenient size grouping of input records to handle in a given computer run; the size of a cut varies according to the program used.) The program matched all records with identical SSN's and compared their ZIP codes and name controls. (Name controls are the foreshortened last names used for file identification purposes by the IRS and the ASCS.) Use of such codes was essential to prepare an acceptable EIN and SSN match. For records containing blank or unacceptable name controls, routines were devised to search for the surname and automatically generate acceptable controls. The program was used to identify records for which the same SSN had been assigned to more than one person. If either the ZIP codes or the name controls and the SSN's matched, the records were considered duplicates, and the record with the lower priority was dropped after any unduplicated codes were transferred to the record kept. Several files emerged from the SSN unduplication program, including (1) unduplicated records with ZIP codes, (2) unduplicated records without ZIP codes, (3) records containing EIN's, (4) duplicates, and (5) possible duplicates. Possible duplicates were records that had identical SSN's but differing name controls and ZIP codes. These records were displayed on a computer printout and sent to Jeffersonville for clerical review.

SSN unduplication counts

INPUT	11,446,959	
EIN cases	382,425	—To EIN unduplication
Unduplicated SSN, no ZIP	849	(This was not the total num-
Unduplicated SSN with ZIP	4,736,285	ber of cases that were in-
Possible duplicates	82,399	cluded in EIN unduplica-
Duplicates dropped	6,325,833	tion; these were cases that
Trace duplicates	23,849	had both SSN's and
Trace, possible duplicates	309	EIN's. This was not the
Trace, unique	2,393	total output of the phase;
More than 9 duplicates	1,338	4,737,901 records without
		EIN's went directly to the
Output	5,120,326	geocoding and ZIP code
		assignment phase.)

Employer Identification Number (EIN) Unduplication

The second phase of unduplication included all records having EIN's, except those eliminated during SSN unduplication. The program matched records with identical EIN's and compared their name controls. If the name controls also matched, the records were considered duplicates, and the ones with the lowest priority were dropped. If the name controls did not match, the records were placed in a file of possible duplicates and sent to Jeffersonville for clerical resolution.

EIN unduplication counts

INPUT	1,325,698
Unduplicated EIN, no ZIP	5,751
Unduplicated EIN, with ZIP	724,735
Possible duplicates	86,642
Duplicates	593,788
Trace duplicates	2,406
Trace, possible duplicates	268
Trace, unique	511
More than 9 duplicates	1,929

Name and Address Unduplication

All records not eliminated as duplicates during the SSN and EIN unduplication stages passed through a third unduplication phase which matched name and address information.

ZIP Code Assignment. First, the file was sorted by 5-digit ZIP code. Within the file of about 6 million records, there was a small group having either no ZIP codes or inaccurate ZIP codes. These were edited and assigned ZIP codes by using a geographic reference file and comparing the post office names in the addresses.

Several items of information (post office box, house, and rural route number) extracted from the street address field were used later in the name and address unduplication process. These numeric entries were standardized, and house and rural box number fields were created. (The house number field included space for the house and rural route numbers.)

All 6 million records then were passed through a series of computer merging and cutting operations. The files within each of 30 cuts were sequenced by code; between cuts, the entire file was sequenced by ZIP code. Every mail record in the file was then assigned a unique serial number, the census file number (CFN), according to ZIP-code sequence. Cases outside the main file also were assigned CFN's. The ranges for CFN's for various files appear below:

Main file single units	0,000,001-6,182,147
Agricultural services	7,000,001-7,200,000
Agricultural services adds	7,200,001-7,999,999
Main file single-unit adds	8,000,001-8,999,999
Multiunits	9,500,001-9,999,999

Although assigning CFN's at this stage resulted in some being deleted from the final mailing list, it was decided to use this procedure so that CFN's could be used to control records sent for clerical unduplication.

Name Recode. By extracting from the name field of the address, the computer produced two four-character alphabetic codes for each person's name; one code corresponded to the first name while the other corresponded to the last name. These four-character codes consisted of the initial plus three letters of the appropriate name, with vowels and double consonants deleted, so that "COLLINS" would be recoded as "CLNS." (This name recode was different from the name control and was more complicated to assign. Name recodes were used for only those records which were to pass through name and address unduplication.)

In preparation for name unduplication, special arrangements were made for records with addresses containing compound names. (Compound names are those that form a union of two or more names, i.e., von Houton, St. James Drive.) If there were more than two names at one address, various combinations of name recodes were created. Where there were at least two given names in addition to the surname, the recode of the same surname was combined with a recode for each of the other

names. A separate record was then issued for each of these recode combinations.

Example: If a record contained the name "Robert Timothy and Marjory Johnson," a separate record would be issued for each of the following name recode combinations: (1) RBRT JHNS, (2) TMTH JHNS, and (3) MRJR JHNS.

In the name unduplication program, name recodes were compared. If they matched, the address information previously extracted was compared. As a result of this matching, one of three conditions was determined to exist: (1) Each of the matching cases had unique addresses. Therefore, they were considered individual establishments and were included, without change or further unduplication, in the "clean" mailing file. (2) If the address information for the matching cases showed that the cases were duplicates, the lower priority address was dropped and the one with the higher priority was placed in the clean mailing file. (3) Based on the address information, it was uncertain whether the records represented identical cases. These were considered possible duplicates.

As in the two preceding unduplication phases, computer listings of possible duplicates were sent to Jeffersonville for clerical resolution. For all phases combined, there were 250,703 possible duplicates; 210,261 were resolved by clerical review and subsequently merged with the clean mailing file.

Of the 6,175,991 records input to the third phase name and address unduplication, 5,330,932 were included in the unduplicated mailing file. These records included the 210,261 that were clerically resolved and the possible duplicates from all phases. Because of printing and postage budget limitations, and based on the coverage within a given State, a sample of the "ASCS only" records, representing cases with a high probability of having farming operations, was selected for inclusion on the mailing list. Overall, 1,252,242 low probability records, about 80 percent of the "ASCS only" file, were dropped.

All records included on the mailing list were split into two files. The first contained 55,053 cases to be handled in Jeffersonville and included farms in Hawaii and Alaska, State "must"² cases, and late additions. State "must" cases were selected from the census universe mail file by an additional computer processing cycle. These cases were those for which (1) data would have to be obtained and not imputed from similar operations, (2) a satisfactory explanation would have to be given if the addressee was not engaged in agricultural production in 1974, and (3) special analyst review of the census report would have to be made. These "must" cases were identified by alpha/plant numbers and special size codes, and then coded by the insertion of symbols—***, AAA(abnormal) or MMM(multi-unit)—in the SIC field of the address label. The following records were selected:

1. All multiunits identified in the precavass, plus units for companies having both agricultural production and service establishments that required separate identification (size code M).

²"Must" cases were those agricultural operations that were so large that failure to include their data would significantly distort the census figures. The total value of sales required to qualify as a "must" case varied from State to State, but was never less than \$100,000.

2. Abnormal farms (size code B).
3. Farms with estimated value of products sold of the following amounts, depending on the particular State:
 - a. \$100,000 and over (size codes 1, 2, and 3): Alaska, Connecticut, Hawaii, Massachusetts, New Hampshire, Rhode Island, Vermont, and West Virginia.
 - b. \$200,000 and over (size codes 1 and 2): Alabama, Delaware, Georgia, Indiana, Kentucky, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, Utah, Wisconsin, and Wyoming.
 - c. \$500,000 and over (size code 1): Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Iowa, Kansas, Louisiana, Minnesota, Nebraska, Oklahoma, Oregon, South Dakota, Texas, and Washington.

The second file contained 4,023,637 addresses to be sent to a private contractor for the combined process of printing and labeling forms. (See p. 20 for discussion.) This file included three subgroups determined by the type of form (A1, A2, black A1) to be mailed. There were 2,174,462 cases in the A1 file, 1,742,829 in the A2 file, and 106,346 in the black A1 file. The black A1 forms were used for large "must" cases, which included farms (assigned codes 2 or 3) that were not designated as State "must" cases in items 3b or 3c above.

Size codes 2 and 3: Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Iowa, Kansas, Louisiana, Minnesota, Nebraska, Oklahoma, Oregon, South Dakota, Texas, and Washington.

Size code 3: Alabama, Delaware, Georgia, Indiana, Kentucky, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, Utah, Wisconsin, and Wyoming.

Evaluation Sample. Part of this address-splitter program was devoted to selecting a sample from the unduplicated mail file to be used as an evaluation sample throughout census processing. The sample of about 20,000 cases was selected systematically within size groups, using a random starting point for each output file.

Size code	Sampling rate
1	All
2	1 in 30
3	1 in 100
4	1 in 200
5	1 in 400
6	1 in 400
7	1 in 500
8	1 in 500
9	1 in 1,000
0	1 in 1,000
A	1 in 1,000
M	1 in 100

Each case was assigned a single letter code on its mailing label for easy identification.

Several codes appeared on the address labels. The derivation or sources of CFN's, State and county codes (geocodes), and EIN's were discussed above. Size codes were derived from original-source input tapes during formatting operations, and since each source had its own measure of size, these had to be interpreted and standardized. Source and special list codes were transferred from tapes to labels during formatting and unduplication. The label date was assigned during the label printing process.

Trace Sample

A "trace" sample was used to follow the progress of the records throughout the unduplication process. The sample was selected by flagging every 1,000th record during formatting. These records were displayed and reviewed by a research staff and a number of problems were pinpointed and averted. For example, it was discovered that all records in the IRS 1065 file contained the same size code. It was also noted that several of the special list files had the individual's last name first. If undetected, this would have created problems in the formation of name controls and name recodes.

Trace records also proved useful in the testing computer programs, since the logic flow for a number of records could be followed whenever changes were made. Trace records were used as quality control aids during each unduplication phase.

Three trace files emerged from each unduplication program: (1) trace duplicates and any matching records that were dropped, (2) trace possible duplicates and any records which might be duplicates of them, and (3) trace unique records that did not match any other records during a particular phase of unduplication. After unduplication, there were 7,932 records in the trace sample. This increase resulted from the addition of records related to those in the original trace file.

Agricultural Services

The enumeration of agricultural services was carried out as part of the mail-out/mail-back operations of the 1974 Census of Agriculture, and covered the 50 States and the District of Columbia.

The agricultural services report form 74-A40 was a 10"x30" sheet, folded to 10"x7½", on white stock with printing and shading in blue ink. The content for 1974 was very similar to that of 1969, and included inquiries on gross receipts, payroll, and location during 1974; services performed (e.g., soil preparation, veterinary services); capital expenditures; expenditures for electricity, gasoline, petroleum, and other fuels; business activities not connected to providing agricultural services; and so on. (For a description of the changes made in the A40 form for the 1974 census see ch. 3; see app. F for a facsimile of the form.) Supplemental data were collected from farm operators on receipts and expenditures for agricultural services on the standard report forms of the 1974 Census of Agriculture and, for cotton ginning, from reports compiled during the ginning season each year. The data-collection effort for agricultural services is described in chapter 4.

Definition of an Agricultural Services Establishment

As in 1969, the 1974 enumeration of agricultural services was conducted on an establishment basis. For census purposes, an agricultural service establishment was defined as an economic unit primarily engaged for a fee or on a contract basis in any of the detailed industries included in SIC major group 07;³ that is, it must either have received 50 percent or more of its gross receipts from agricultural services or, for cases in which no single activity accounted for 50 percent of gross receipts, the largest source of receipts must have been agricultural service activities.

Printing, Addressing, and Mailout

In contrast to the general decision that few changes should be made from the last census, the 1974 census printing plans began with modification of the 1969 report forms to accommodate content and design changes. In the spring of 1974, dummy copies of the principal forms were made, and comments were requested from printers who were interested in bidding on a contract to print and assemble the report forms, instruction leaflets, mailout and mailback envelopes, and address labels. One contractor responded that he was unable to handle the sizes of paper specified, but presented alternative suggestions that included a self-mailer report form that incorporated the instruction leaflet and return envelope. The cover of the form would serve as a mailout wrapper on which the addressee's name, address, and census identification codes would be printed in lieu of a separate address label. All or any part of the address information could be printed on other pages of the form, an advantage for data keying and if only part of the form was returned. In one continuous operation, the forms could be printed in several colors, addressed, folded, and grouped by ZIP code for mailing.

This concept was acceptable to the Bureau and, in subsequent meetings with the printer, modifications were made to adapt to census needs. The contractor was able to purchase acceptable paper stock, thinner than that used for 1969, so that postage costs would be reduced. Some economies were achieved in the assembly pattern, and a sheet size was chosen for the A1 and A2 forms that would fit the contractor's equipment. In mid-May, the Government Printing Office (GPO) allowed non-competitive procurement of the A1 and A2 mailing packages and the A3 thank you cards (also to be addressed during printing), and a contract was signed on June 24, 1974. This contract was amended in November and December 1974 to revise quality control procedures, final quantities, and delivery dates for the printing, addressing, and mailing of followup forms. The contract called for the addressed forms to be bundled by ZIP code

³ Soil preparation services, crop services, veterinary and other animal services, farm labor and management services, and landscape and horticultural services.

and mailed, and for a quantity of unaddressed forms to be shipped f.o.b. to Jeffersonville for use with cases that required special handling.

Other forms (such as the A40 for agricultural services and the A1 forms for Hawaii, Puerto Rico, Guam, and the Virgin Islands), to be used separately by enumerators or assembled into traditional mailing packages in quantities not considered feasible for the contractor's equipment, were printed either by the Commerce Department or the Government Printing Office using

existing General Services Administration contracts. Purchases of the principal report forms, instruction leaflets, followup cards, and envelopes are detailed in table 2.1. Certain portions of the Bureau's stock of envelopes (remaining from completed surveys) were reserved for agriculture census correspondence, specifically 200,000 mailout and 316,000 return envelopes. Open-window mailout and return envelopes, salvaged from the 1969 census and overprinted as necessary, were used with the A40 agricultural services report forms.

Table 2.1. Principal Contracts for Report Forms, Instruction Sheets, Cards, and Envelopes

Form No.	Description	Total quantity received	Delivery period	Contractor	Cost
74-A20	Preliminary Survey of Selected Operations [Precanvass], 6 pages, 30"x15", folded to 10"x15" and then to 10"x7-1/2", white offset sub. 100, printed blue ink on two sides	90,000	March 1974	Government Printing Office (GPO)	\$2,860
74-A21 (Prelist)	Preliminary Survey of Selected Operations [Precanvass], 8 pages, 20"x15", folded to 10"x15" and then to 10"x7-1/2", white offset sub. 100, printed in black ink on two sides	5,000	March 1974	GPO	343
74-A21 (Con.)	Continuation sheet for form 74A21, 15"x10", folded to 7-1/2"x10", white offset sub. 100, printed black ink on two sides	1,000	Feb. 1974	Commerce	54
74-A1 ["black" or "green"]	Agricultural production report form, 22 pages, 16"x10-1/2", folded to 8"x10-1/2", white bond sub. 30-32, printed two sides in black and red ("green" form printed in green and red ink) with 4-page instruction sheet of same size, newsprint, printed two sides in black ink, and envelope, 12"x10-1/2", recycled offset book sub. 100, printed in black ink	4,560,000	Dec. 1974-May 1975	Commercial	616,740
74-A1 (Con.)	Agricultural production report form, continuation sheets for form 74-A1 sections 11, 12, and 16, 8"x10-1/2", white offset sub. 100, printed one side in green ink	500 sets	Nov. 1974	Commerce	
74-A1(H)	Agricultural production report form for Hawaii, 20 pages, 16"x10-1/2" folded to 8"x10-1/2", white offset sub. 100, printed two sides in blue and red ink	12,000	Nov. 1974	GPO	2,000
74-A1(G)	Agricultural production report form for Guam, 4 pages, 16"x14" folded to 8"x14", white offset sub. 100, printed two sides in black ink	5,000	Oct. 1974	Commerce	223
74-A1(PR)	Agricultural production report form for Puerto Rico, 8 pages, 21"x16-1/4" folded to 10-1/2"x16-1/4" and then to 10-1/2"x8-1/8", white offset sub. 100, printed two sides in blue ink	300 (English)	Dec. 1974	Commerce	227
		80,000 (Spanish)	Jan. 1975	GPO	4,250
74-A1(VI)	Agricultural production report form for the Virgin Islands, 4 pages, 16" x 14" folded to 8"x14", white offset sub. 100, printed two sides in black ink.	1,600	Mar. 1975	Commerce	115
74-A2	Agricultural production report form, 10 pages, 16"x10-1/2", folded to 8"x10-1/2", white bond sub. 30-32, printed two sides in brown and red, with 4-page instruction sheet of same size, newsprint, printed two sides in black ink, and envelope, 12"x10-1/2", recycled offset book sub. 100, printed in black ink	3,282,000	Dec. 1974-May 1975	Commercial	327,872
74-A3	"Thank you" card for agricultural production report form, 8"x4", Index Bristol sub. 180, printed two sides in black and red ink	4,096,000	Jan. 1975	Commercial	35,591
74-A11(H)	Instruction leaflet to accompany 74-A1(H) for Hawaii, 6 pages, 24"x10-1/2" folded to 8"x10-1/2", white offset sub. 100, printed two sides in black ink	10,000	Nov. 1974	Commerce	1,196
74-A40	Agricultural services report form, 4 pages, 20"x15" folded to 10"x15" and then to 10"x7-1/2", white offset sub. 100, printed two sides in blue ink	300,000	Dec. 1974	GPO	15,000
74-A42	"Thank you" card for form 74-A40, 8"x3-1/2", white card stock sub. 180, printed two sides in black ink	165,000	Nov. 1974	GPO	1,750
74-A4	Outgoing mail envelope, 11"x8-1/2", sulphate stock, with 5"x2" right-hand open window, printed in black ink	100,000	Dec. 1974	Commercial	3,320

Printing and Addressing Operations

Quantities. The quantity of A1, A2, and A3 forms shipped reflected adjustments made to the 1974 census mailing list and the need for extra copies if the followup workload proved to be greater than for 1969. The quantities specified in the contract were as follows:

Form number	Quantity ordered
74-A1 (green)	4,560,000
74-A2	3,282,000
74-A3	4,170,000

NOTE: The "green" forms were used for the majority of operations with agricultural production valued at \$2,500 or more; the "black" forms were used for "must" cases, multiunits, abnormal farms, and other large operations.

Addressing. Addressing was accomplished during the printing process by a computerized jet-imaging system. (See footnote 4 on p. 23.) This system printed the names, addresses, and identification codes contained on magnetic tapes in black ink on the front cover of the A1 and A2 report forms. The census file number was repeated on page 1 and again on the back cover. The A3 cards were addressed on the front only. The process produced approximately 200,000 printed and addressed report forms every 24 hours, and was run continuously 7 days a week except on holidays.

In the summer and early fall of 1974, the Bureau prepared three preliminary computer test tapes in the format to be used in addressing the report forms; two contained fictitious addresses and one contained actual addresses. The records on these tapes, and eventually the final tapes, were converted from the internal character set used by the Bureau to ASCII (American Standard Code for Information Interchange) needed for the contractor's equipment. The final tapes were provided in 2,400-foot reels, 9-track, 800 bpi, odd parity. No significant problems were encountered in testing.

At the end of November 1974, the Bureau shipped 74 reels of computer tape to the contractor. These tapes, copied from the originals in Suitland, contained approximately 4 million names and addresses in three separate files—106,000 large cases to receive the black A1 forms, 2.17 million cases to receive the regular green A1 forms, and 1.74 million cases to receive the short A2 forms.

Quality Control. Quality control procedures were established to make certain, through a 1:5,000 sampling, that the technical specifications for paper opacity, weight, etc., were met; that the envelope pocket was glued properly and the envelope flap had sufficient rewettable glue to stay sealed; that printing was properly aligned, sharp, and conformed within plus or minus 5 percent with the approved color samples; that the forms were folded square and that all letters and numbers were completely legible. The critical error level was set at one in each sequence of 10,000 mailing pieces produced. Critical errors included, but were not limited to, omissions of addresses; dropped,

garbled, or transposed characters; illegible print; duplicates; and faulty paper stock.

For control purposes, the Bureau furnished, along with the address tapes and also with the followup tapes prepared later, a tabulated ZIP code control-count listing of the number of addresses for each mailing. The listings were in ZIP code sequence, from the lowest to the highest. Each listing indicated the number of addresses for each 5-digit ZIP code area, each postal center (the first three ZIP digits), each reel of tape, and each form (black A1, green A1, and A2). During the printing and addressing operation, the contractor maintained records that documented any adjustments and included the beginning and ending serial numbers of each tape reel, the serial numbers of critical defective mailing pieces, and the serial numbers on each side of illegible blocks of addresses. The counts were then compared with the control listing. The tolerance between the printing count and the tape reel count, approximately 60,000 addresses, was plus or minus 16. In the event of an address failure, the information was typed on a label and attached to a blank form; if more than five forms were defective at any press stop, the defective part of the press run was repeated and the waste destroyed. No unusual problems were encountered in quality control.

Security. To conform with official confidentiality requirements, a Bureau representative was on hand during the entire printing period. During the first 3 weeks, or until all 74 tapes had been used to address the A3 cards and the report forms, the representative was a computer specialist who could solve tape reading problems if they occurred.

Since the address tapes and the addressed report forms were classified under the confidentiality provisions of Title 13, United States Code, facilities were provided for their storage. Seventeen supervisory members of the contractor's staff were deputized as Census Bureau agents so they could handle these records. The Bureau representative observed the safeguards maintained during production, destruction of waste, etc., and unpacked the address tapes on their arrival, verified their condition, and supervised their return to the Bureau for blanking.

Initial Mailout. The printing and addressing operation began at the contractor's plant on December 1 and continued uninterrupted (except for holidays) until completion on January 5, 1975. The finished report forms were bundled by 5-digit ZIP code and, beginning on December 26, 1974, were shipped on a flow basis to the postal service centers for delivery as third-class bulk mail. A total of 4,023,637 report forms were shipped: 2,174,462 green A1 forms, 106,346 black A1 forms, and 1,742,829 A2 forms.

Approximately 300,000 green A1, 120,000 black A1, and 100,000 A2 forms were printed without addresses and codes and shipped to Jeffersonville early in December.

"Thank You" Cards. During December 1974, 70,000 thank you cards (form A3; see app. F for a facsimile) were printed and addressed to the same recipients as those in the original mailing. These cards were mailed third class on January 14.

Labels for Unique Mailing Pieces

Nearly 3.6 million report forms, cards, followup letters, and other mailing pieces required separate address labels. For about 10 percent of these cases, (namely, those for agricultural services, agricultural production in Alaska and Hawaii, multiunits, and abnormal farms) labels were produced as needed by high-speed printer. Most of the labels were printed, four addresses across, on pin-fed label stock for use on the labeling machines in Jeffersonville. Some were printed on pressure-sensitive labels for manual use. Approximately 203,000 labels were produced for the original mailout, and about 100,000 for followup purposes.

Because the time between receipt, check-in, and the delivery of the followup mailing pieces to nonrespondents had to be kept to a minimum, and because the followup dates had to coordinate with other work scheduled for the Bureau's computer, the dates for preparation and affixing of labels were critical. This situation caused few problems for the printing contractor because the A1 and A2 followup report forms were addressed as they came off the presses. It was necessary, however, to incorporate a similar procedure for the large followup mailings handled in Jeffersonville. In negotiations with GPO in March 1974, it was determined impracticable for GPO to produce the larger labels now needed for the 1974 census and, more important, to produce them immediately upon receipt of the Bureau's followup address tapes. Accordingly, the Bureau turned to commercial sources and, in January 1975, selected a label contractor who used a computer-controlled jet-ink imaging process⁴ similar in principle to that used by the printing contractor.

The quality and security controls specified were similar to those required for the printed forms.

The label contract called for the delivery of 1.8 million labels on February 25, 900,000 on April 18, and 600,000 on June 12, 1975; in each case, the Census Bureau delivered the necessary computer tapes the day before. Running at a paper speed of 400 feet per minute, or 192,000 labels per hour, it was possible to complete the first run of 1.8 million labels in about 10 hours.

Jeffersonville Mailing Operations

Agriculture census mailout operations in Jeffersonville consisted of a number of specialized mailings, all of which used printed address labels and consisted of A1 or A2 report forms, thank you cards, or various other forms, inserts, and return envelopes assembled into mailing packages. Each single-unit package was addressed by applying the label mechanically onto the A1, A2, or A3 form and onto the A1 (Hawaii) and A40 (agricultural services) forms through the windows of the mailout envelopes. Four labeling machines at Jeffersonville performed this function at the rate of 10,000 addresses per hour each. For partnerships, A19(L) cover letters were taped manually to page 1 of the A1 report form before mailing. Multiunit and specially tailored

packages (such as for abnormal farms) were addressed using pressure-sensitive labels that were applied manually.

The initial mailout operation took place between early December 1974 and mid-January 1975, with actual mailing commencing on December 28. Table 2.2 indicates the quantities and contents of the different packages mailed.

Multiunit and Abnormal Farms. The assembly of single-unit mailing pieces was fairly simple since the specifications were identical for any given type; however, multiunit and abnormal-farm cases required special handling. For each multiunit case, Bureau headquarters furnished the Jeffersonville packaging unit with two pressure-sensitive master address labels—one for a folder in which all materials for each case would be assembled and one for the outgoing envelope or carton—and three unglued labels for each unit within the multiunit establishment. One of the labels was attached to the appropriate report form for each unit and the others were used for review and control.

When all materials for one company were present (the transmittal letter and other inserts and the completed report forms from the precavass, when available), the folder contents were compared with the precavass information. Addresses were changed and report forms were added or removed as necessary. All changes were recorded on a correction document. The return envelopes used for the A1 report forms were discarded. The remaining contents of the folder, together with a folded blue return envelope, were placed in an outgoing envelope (also blue) or carton, which was labeled and left unsealed for inspection. The company alpha number on the outgoing label was then matched against the master label of the control record.

The majority of the abnormal farm mailings were assembled and mailed from Jeffersonville. Usually each mailing piece was made up of a mailout envelope, an A1 black report form (or several in the case of multiunits) that already contained a return envelope, and either an A-13 (Special Instructions for Grazing Associations) or A-14 (Special Instructions for Institutional Organizations) flyer. Cover letters were added for packages mailed to colleges, universities, and Indian reservations.⁵

"Thank you" Cards. Using duplicate labels from the original mailout, thank you cards for approximately 246,000 single-unit cases were labeled in Jeffersonville during early January 1975, inspected by methods similar to those described below, and mailed on January 14. Agricultural services establishments received form A42 cards; all others, form A3 cards. (See app. F for facsimiles.) Cards were not sent to multiunit or abnormal farms.

Quality Control. The mailing packages for Hawaii and agricultural services single units were inspected after assembly and before labeling. Each package was weighed and the address windows were checked to be certain the addresses were visible.

⁴ This imaging process consists of moving a length of paper continuously under streams of computer-controlled ink droplets. Alignment of the image is extremely precise. The speed of imaging can be controlled to approximately 40,000 lines per minute.

⁵ Two Census Bureau staff members met with Bureau of Indian Affairs area representatives in Albuquerque, N. Mex., on November 21, 1974, and initiated reporting arrangements for 170 farms on 13 Indian reservations. Abnormal farm cases were followed up ad hoc, and were not included in the routine followup mailouts described in this chapter.

Table 2.2. Initial Mailout from Jeffersonville, Dec. 28, 1974 - Jan. 14, 1975

Legend: SU = single-unit

MU = multiunit

Category	Quantity mailed	Label sequence	Label identification ¹	Mail class	Mailing package contents
State "must" exc. Hawaii SU	22,393	ZIP code	***	3rd	A1 "black" report form.
Hawaii SU	4,884	ZIP code	HHH or ***	1st	A4 mailout envelope containing A1(H) report form, A11(H) instruction leaflet, and BC-2537 return envelope.
Alaska SU	1,414	ZIP code	LLL	1st	A1 "green" report form.
Precanvass SU	31,449	ZIP code	none	3rd	A1 "green" report form.
Agricultural services SU	139,802	ZIP code	EI plus 10-digit number	3rd	BC-2515 mailout envelope containing A40 report form, A41(L) transmittal insert, BC-2516 return envelope.
Multiunits	6,300 pkgs.	Alphabetic	MMM	1st	BC-242 mailout envelope, or carton, sent to company "home" address, and containing—
Agriculture MU establishments, exc. Hawaii	(10,214 forms)	Alpha/plant No.	Alpha/plant No.		A1 "black" report forms in alpha/plant sequence, A11 transmittal insert, and BC-1578 return envelope.
Agriculture MU establishments, Hawaii	(93 forms)	Alpha/plant No.	Alpha/plant No.		A1(H) report forms in alpha/plant sequence, A11(H) instruction leaflet, A11 transmittal insert, and BC-1578 return envelope.
Agricultural services MU	(3,506 forms)	Alpha/plant No.	Alpha/plant No.		A40 report forms in alpha/plant sequence, A11 transmittal insert, A41(L) transmittal letter, and BC-1578 return envelope.
Agriculture partnerships, exc. Hawaii	42,294	ZIP code	none or ***	3rd	A1 "green" report form with A19(L) cover letter taped inside.
	3,936	ZIP code	none or ***	3rd	A1 "black" report form with A19(L) cover letter taped inside.
Agriculture partnerships, Hawaii	94	ZIP code	HHH or ***	1st	Same as Hawaii SU (see above), but with A19(L) cover letter added.
Abnormal farms	2,898	NA	AAA	1st	BC-242 mailout envelope, A1 "black" report form, and instruction sheet indicated below:
	² 704 Colleges and universities			—	A-14 with cover letter
	390 Grazing associations			—	A-13
	³ 215 Indian reservations			—	A-14 with cover letter
	400 High schools, industrial research, artificial insemination, misc. farms			—	A-14
	363 Churches, colonies, church-affiliated farms			—	A-14
	298 Prisons			—	A-14
	200 County-affiliated orphanages			—	A-14
	² 173 USDA, State, and Federal game preserves			—	A-13, A-14 ⁴
	155 State-affiliated farms			—	A-14

¹ The various categories were identified by the substitution of three letters or three asterisks in the SIC (standard industrial classification) field of the label, or by the presence of an alpha/plant number which was unique for each establishment and for each unit within it.

² Includes mailout from Bureau headquarters.

³ Mailed from Bureau headquarters.

⁴ Both A-13 and A-14 instruction sheets were sent to game preserves where grazing permits may have been issued.

All packages for Hawaii were inspected; those for agricultural services were sampled as follows: All packages were inspected until 100 consecutive ones were found to be error free. After that, every 50th package was checked until a defective one was found, in which case the examination for 100 consecutive error-free packages was resumed.

The contents of all multiunit packages were verified and any errors were corrected before the package was sealed. Verification consisted of the following steps:

1. The alpha numbers on the labeled forms within the package were compared to the alpha number on the package label to make certain they were identical.
2. The transmittal inserts were checked to ensure that they were appropriate.
3. Each package and its contents were checked against the control records (multiunit universe listing) to make certain that no units were missed. Any discrepancies were corrected.

Every 20th multiunit package was reverified in the same manner. All errors discovered in the process were tallied and the packages were sealed.

All labeling was inspected in much the same manner to assure that each label had been affixed to the proper mailing package (e.g., that labels with *** identifications were attached to black A1 forms) and that the CFN (census file number) was within the appropriate range for the package used. All mutilated labels or garbled addresses were retyped on pressure-sensitive labels and affixed to the packages.

Records were kept of this verification process, and errors were tallied by kind. In packaging, the principal error, which represented about 1 percent of the cases, was the inclusion of more than one cover letter or instruction sheet. About 100 return envelopes contained printing errors. The labeling rejection rate was 0.6 percent, approximately half of which represented labels that were improperly positioned on the packages. A few multiunit labels were detected on which the same alpha/plant numbers were used for different companies. All of these errors were corrected before mailing. In general, the packaging and labeling operations were considered highly satisfactory.

Publicity

General

A public information campaign was a valuable assist in collecting data as easily and efficiently as possible. Not only were farmers encouraged to complete the report forms, they were also informed of the intended use of the data. The precensus publicity program alerted the farmers to the desirability of keeping accurate records to simplify their task and enhance the accuracy of information reported.

The same publicity procedures used in the 1969 census, the first all-mail census, were retained for 1974. Beginning with a

January 1974 news release reminding farmers to keep accurate records, the information program continued throughout the enumeration period, climaxing in June 1975. The public information program, which included followup work, utilized various media: television, radio, newspapers, farm publications, etc.

Theme and Symbol

The rooster symbol used in 1969 was redesigned for the 1974 census. His message was "Fill it out, mail it in—NOW!" This theme was stressed in all publicity used for radio, television, pamphlets, posters, news releases, newspapers, and other appropriate places.

Television

The wide audience reached by television makes it a desirable vehicle for publicity. From December 1974 to April 1975, public service announcements were televised on the 200 stations that have farm programs or coverage. Country singer Loretta Lynn and puppeteer Bill Baird each filmed 10-, 30-, and 60-second announcements which were aired, along with animated film that dramatized the mailout/mailback census story. Publicity was also obtained through the USDA program "Down to Earth."

Rooster slides, which could include a station's call letters, and spot-announcement voice scripts were furnished to stations for use from January through May 1975. These scripts covered specific phases of the enumeration process; for instance, April and May spots stressed, "It's not too late. Mail it in NOW!"

Radio

Since radio is the main news source of farmers, the Bureau used this medium extensively. Spot announcements featuring famous personalities were recorded and the tapes were furnished to radio farm broadcasters and program directors at 1,100 selected stations. In addition to periodic news releases, stations received broadcast spots on a flow basis. Voice scripts provided to stations met both general and specific publicity needs. (Special scripts were furnished after April to areas of low response.) The USDA weekly tape, "Agriculture—USA," and the American Farm Bureau weekly tape presented several programs about the census.

Printed Materials

Throughout the public information program, the Bureau used the services of newspapers, farm magazines, and agribusiness house organs. Traditional news releases tailored to meet local needs at various phases of the data collection process comprised only a part of the publicity campaign.

Early in 1974, the Bureau asked more than 500 editors of farm magazines if they would use a cover photograph about the census in their December 1974 or January 1975 issues. About 250 responded, and photographs featuring agricultural activities indigenous to each magazine's circulation area, as well as articles

on various types of farming and ranching, were prepared and delivered for use by November 1974.

Two pamphlets were also prepared for general use. "The '74 Census of Agriculture" was completed in August 1974 and 260,000 copies were printed. "Agriculture USA—1840 to 1974," outlining the history of the census of agriculture, was completed in October 1974 and 20,000 copies were printed. A third pamphlet, "Why This Census?", prepared specifically to be included in the third followup package, was completed in January 1975.

Two posters were prepared to advertise the census, both designed with pictures of a rooster perched on a rural mailbox calling, "Fill it out—Mail it back." There were 135,000 posters printed. They differed only in their colors: one was red, blue, and black on white and the other was orange, red, yellow, and black on white.

Farm Census Guide

The Bureau also prepared the Farm Census Guide (form 74-A10), a reference manual for county agents, teachers, and others who assisted respondents in completing their report forms. These 54-page booklets, together with cover letters and/or other materials listed below, were inserted in envelopes at the Bureau's Jeffersonville facility and were shipped in bulk or mailed directly on the priority basis noted below beginning in the latter part of January 1975.

Priority	Organization or agency	Number of copies	Contents of mailing package
1.	Agricultural Stabilization and Conservation Service, USDA	6,500	A18(L) cover letter A10 guide
2.	Extension Service, USDA	4,200	A18(L) cover letter A10 guide
3.	High school, college, and university vocational agriculture departments	9,000	A16(L) teacher cover letter A10 guide A15 teacher lesson plan
4.	Farmers Home Administration	2,200	A18(L) cover letter A10 guide
5.	Census Bureau regional offices	1,200	A10 guide (no envelope)
6.	Kansas Crop Reporting Board	110	A10 guide 1974 Census of Agriculture brochure
7.	Rural banks	9,000	A17(L) banker cover letter
8.	Soil Conservation Service, USDA	3,100	A18(L) cover letter A10 guide

Agribusiness

Since those involved in agriculture-related industry have an interest in data collected in the census of agriculture, the Bureau solicits their assistance in publicizing the census. In addition to the news media, county agents, and other interested groups and

individuals, agribusiness representatives received census information including the pamphlets "The '74 Census of Agriculture" and "Agriculture USA—1840 to 1974." Agribusiness assistance included, but was not limited to the following: Agribusiness house organs published articles about the census in their October or November issues; companies inserted small versions of the census rooster and his message in their display ads; and salesmen distributed posters to the outlets where they did business in November and December 1974.

Organizations

Assistance in educating the public about the census was solicited from many groups representing a broad spectrum of farm-associated interests. Land grant colleges and universities and the Future Farmers of America assisted the Bureau by such activities as distributing posters. The Farm Credit Banks, the Federal Land Bank Association, and the Production Credit Association requested copies of posters and the brochure, "The '74 Census of Agriculture" to distribute to their member banks.

Cooperation was received from the organizations, agribusinesses, and agricultural trade groups represented on the Census Advisory Committee on Agriculture Statistics. (See p. 9 for a list of the member organizations.)

Since some of these groups sponsored radio programs and publications for their members, these publicity resources were utilized by the Bureau. Articles and photographs tailored to the publications and individuals and scripts for radio and television discussions or talks were provided. Also, a discussion topic was distributed for use at January and February 1975 meetings of community Farm Bureau groups.

The following associations cooperated in the publicity program in various ways:

- American Agricultural Editors' Association
- National Association of Farm Broadcasters (NAFB)
- American Association of Agricultural College Editors
- Agricultural Publishers Association
- National County Agents Association
- National Rural Electric Cooperative Association

Certain Government agencies provided extensive assistance to the public information program. The vocational agriculture instructors of the Department of Health, Education, and Welfare used lesson plans prepared by the Bureau of the Census. The lesson, which was presented in January and February 1975, was sent to approximately 9,500 schools and 2,000 adult farmer night classes. The Department of Agriculture assisted through the following agencies:

- Extension Service
- Agricultural Stabilization and Conservation Service
- Farmer Cooperative Service
- Forest Service
- Farmers Home Administration
- Soil Conservation Service
- Rural Electrification Administration
- Rural Development Service

Key Dates for Planning Operations

Activity ¹	Completion date		Activity ¹	Completion date	
	Planned	Actual		Planned	Actual
Pretest, July 1972			Precanvass, March 1974—Con.		
Mailing date	July 14, 1972	July 14, 1972	Phase I—Con.		
1st followup	Aug. 29, 1972	Aug. 29, 1972	Printing of A20 and A21 report forms	Mar. 25, 1974	Mar. 25, 1974
2nd followup	Oct. 12, 1972	Oct. 12, 1972	Mailing date	Apr. 2, 1974	Apr. 2, 1974
			1st followup	Apr. 30, 1974	May 3, 1974
			2nd followup	May 28, 1974	May 24, 1974
			3rd followup	NA	June 19, 1974
			4th followup	NA	July 11, 1974
Pretest and questionnaire evaluation study, February 1974			Phase II		
Mailing list development	Dec. 31, 1973	Dec. 31, 1973	Mail list development	Apr. 15, 1974	Apr. 15, 1974
Printing of A1 report forms	Jan. 14, 1974	Jan. 14, 1974	Unduplication	May 1, 1974	May 1, 1974
Mailing date	Jan. 17, 1974	Jan. 17, 1974	Mailing date	May 10, 1974	May 3, 1974
1st followup	Feb. 7, 1974	Feb. 7, 1974	1st followup	June 4, 1974	May 24, 1974
2nd followup	Feb. 28, 1974	Feb. 28, 1974	2nd followup	June 25, 1974	June 19, 1974
Receipt and check-in	Apr. 12, 1974	Mar. 8, 1974	3rd followup	NA	July 11, 1974
Field interviews	Mar. 29, 1974	Mar. 29, 1974	4th followup	NA	Aug. 2, 1974
Edit and evaluation tally	Apr. 30, 1974	Apr. 30, 1974	Telephone followup	July 31, 1974	Aug. 2, 1974
			Return mail handling (includes followup)	July 31, 1974	Sept. 30, 1974
			Keying	Aug. 9, 1974	Oct. 15, 1974
Precanvass, March 1974					
Phase I					
Mailing list development					
Source-1969 census list	Dec. 10, 1974	Dec. 10, 1974			
Source-economic census lists, industrial directory, USDA special lists	Feb. 28, 1974	Feb. 28, 1974			

NA Not available.

¹ Planning was suspended in September 1972 and resumed in October 1973.